

S F

287

.S18

# *The Horsemen's Guide*

---

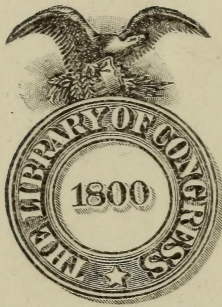
BY

H. SAMPLE

---

*The* Champion Horse Tamer  
of the World

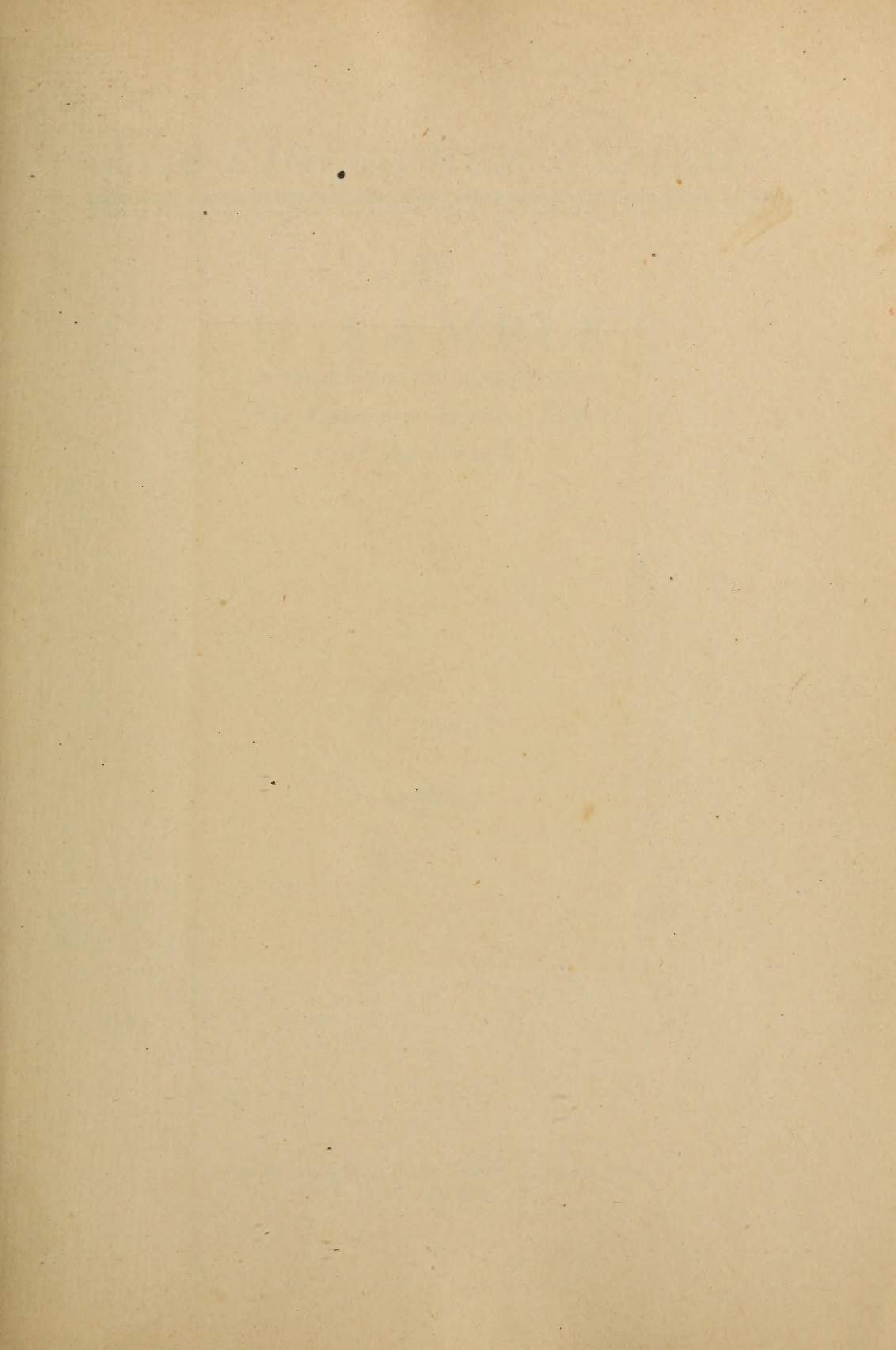




Class SF 287

Book .S18







# *The Horsemen's Guide*

---

BY

H. SAMPLE

---

*The* Champion Horse Tamer  
of the World



12

*Entered According to an Act of Congress 1909,  
by H. Sample.*



SF287  
.S18

Received from  
Copyright Office.  
FEB 19 1919

21

## INTRODUCTION.

---

Having devoted 45 years of my best days in teaching the proper methods of educating the horse and in a field that extends around the world, I feel confident that the knowledge collected will be of great service to the horse world in connection with the training of the horse. I will give my full and complete system of telling the horse's age from the time of foaling up to the age of twenty-one years. The author is still canvassing the country in introducing his system of training the horse, and at the same time guarding against impairing their physical structure or shortening their period of usefulness and profit. Should I succeed in this I feel that I shall be a benefactor and thereby secure my highest aim.

H. SAMPLE.



## WORTHY OF IMITATION.

---

Showmen and public performers who visit Victoria are birds of passage, whose mission is usually to take away as much money as they can, contenting themselves with the cheap return of an expression of gratitude, and of their determination always to think kindly, etc. It is pleasant to be able to record an exception, one unfortunately too rare to this rule. Professor Sample, the celebrated horse-trainer from America, arrived in Melbourne a few months back and succeeded in "raking in" a very large amount of money by his exhibitions of horse taming and training. The Professor, however, is not one of the usual money-grubbers, and, to his credit be it recorded, he gave a performance in the Exhibition Building, the whole of the proceeds of which he generously presented to the Melbourne Charities. As the institutions will share something like £800 from Professor Sample's generosity, the benefit may claim to be the most substantial ones ever given in Melbourne.

We commend the Professor's excellent example as one worthy of imitation by others who, like him, draw their money from the public.

—Melbourne Bulletin.



# MANAGEMENT OF THE HORSE.

---

## HOW TO BREAK A COLT PROPERLY.

The first important consideration in the management of a colt is the proper selection of a yard, corral, or lot, clear of all obstacles that would be at all liable to injure him, and also to have a fence around the place of proper strength and heighth to prevent him from jumping out.

We would suggest that the yard or corral be some thirty-five or forty feet square, if convenient.

If the colt is domesticated and halter-broke, lead him into this lot or corral. Prepare yourself with a pole some ten or twelve feet long, from an inch to an inch and a half in diameter, made of hickory, ash, or any hard, tough wood, sand-papered smooth.

If he is not halter-broken, drive him into the corral with other stock, then turn out all the others.

Take one end of the pole in both hands. Now proceed to handle the colt with the other end. This at first may scare or excite the colt very much—but get him in one corner of the corral. Then reach out your pole and touch the neck or withers as though it was your own hand. We can do this, knowing that if the colt should kick or strike the trainer will be ten or twelve feet away from him, and will not get hurt.

Handle and touch him with this wooden hand until he becomes reconciled to the sense of touch. As the colt becomes more docile, the trainer can keep rubbing and touch-



ing him on the neck with the pole, and gradually approach closer and closer as the colt gets used to being touched.

If he should whirl and attempt to kick, handle him a little roughly with the end of the pole, and get him into the corner again, and proceed as before, rubbing him on top of the neck with the pole until he will allow you to approach close enough to enable you to place your hand on him, being careful not to reach out your hand too quickly for fear of frightening him by the sudden motion of the hand.

Remember all this time that the colt does not understand what you are going to do. When you succeed in getting your hand on him, rub him very gently and quietly until you can rub about the head and neck. Do this for some little time, then take a common five-ring leather halter, and place it on the colt's head quietly and easily.

Be careful, in placing the strap over his neck, to do it very gently, so that it will not strike his neck, causing him to jump and escape.

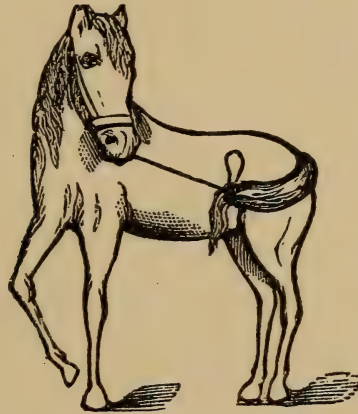
When the halter is on him, take hold of it and draw his head toward you slowly, rubbing the colt with the right hand along his side and back until you can get it back near the tail.

Be careful all the time that the colt does not whirl and kick at you. As soon as the colt will submit to this, catch him by the hair of the tail with your right hand, holding firmly to the halter with the left hand at the same time. This will bring him into a circling position, and cause him to move around. Give him a few quick swings around, holding firmly to the head and tail. This will soon make him dizzy; then slacken up a little on the tail and he will stop.

Then tie a single knot in the hair of the tail, draw it tight and hold the knot firmly in your right hand; divide the hair evenly between the knot and the end of the tail with



the fingers of the left hand; slip the lead of the halter between the hair of the tail, and draw the head and tail together; or near enough to get his body in a circling position, making the halter fast to the tail with a half hitch, and let him go. [See cut No. 1.]



No. 1.

But be careful at first not to tie him up too tight, as this will cause him to whirl around very fast and make him fall down, which is unnecessary.

Use your judgment according to the horse you are operating on. If he is high-strung and of a nervous temperament, it will not be necessary to tie him as short as if he was of a dull, stupid disposition.

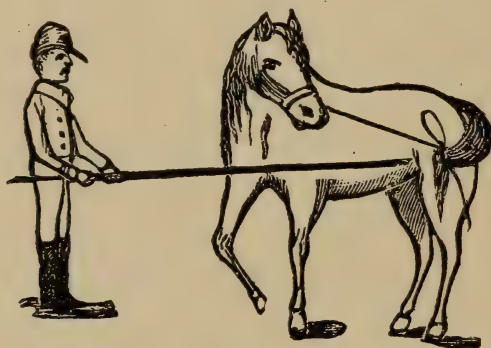
When the colt is fixed in this position—head and tail—his strength is divided against itself. The more he pulls with his head on the halter, the more he pulls his own tail. He will soon learn to stand hitched, and we are sure that a colt hitched in this way will never learn the bad habit of breaking the halter.

The philosophy of this system is to impress the colt at once with the fact that he cannot break loose.

He can lie down, walk about, run around, etc., still he is hitched and can't get loose.

The natural instinct of the colt is to pull upon anything that may be placed on his head or neck, and we take this method of putting pressure on the head.

The next duty of the trainer, after the horse has submitted to this treatment and has learned to stand perfectly still, is to take the pole used in the first instance, holding on to one end and handling the colt with the other. This may start him to going again. [See cut No. 2.]



No. 2.

We now want to operate on the sense of feeling, and by having this pole touch him while he is going around, he will soon find out that it will not hurt him, and will stop as before.

The object in view, in handling the colt with the pole, is to accustom him to being touched all over. If he should kick or strike, do not be alarmed, but keep the end or side of the pole touching him on some part of the body all the time. While he is going around, handle his front and hind legs with this pole, being careful at the same time not to hurt him.

It will take from three to five minutes to accustom the colt to being handled all over with the pole.

This will prepare the colt for the harness. Now, while he is still under the influence of this whirling around, un-



fasten his head and tail and put on the harness as quick as possible.

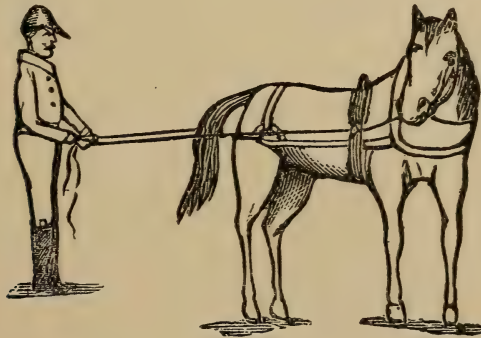
The colt will stand perfectly quiet for two reasons—first, because he is dizzy from whirling around; and, second, because he has been touched all over with the pole, and the touch of the strap or harness will not frighten him.

I use a common set of harness, with a common jointed bit. Have the bit as large as possible, so as not to cut and scar the colt's mouth.

Put the harness on the colt and tie the traces into the ring of the breeching, and instead of putting the lines through the rings on the saddle, put them through the shaft tugs and fasten them to the bit, using long lines, so as to be out of range of the colt's heels—never using any check-rein in breaking a colt.

Now you are ready to teach your colt to guide.

The lines should be placed in this manner, so as to give us a leverage power on the side of the colt, to force him to



No. 3.

the right or left. Instead of attempting to make him go straight ahead, first teach him to turn readily to the right or left. [See cut No. 3.]

Instead of pulling on the lines slow and steady, pull with a quick jerk on one line, turning the horse half way around,

then reverse. This will teach him quickly that he must come around when you pull on the line. Then let him go straight ahead or around the corral. Every little while turn him around quick and short, forcing him to go the other way. When he turns easily and readily by a pull on the line, then he is ready to be taught to stop and start at your command.

While he is walking or trotting around the corral, say "Whoa!" Of course he will not understand what this means. Then pull up sharply and quickly on both lines. Repeat this until the colt will stop at the word "whoa." This will generally take from five to ten minutes.

Secondly, you want to teach your colt to start promptly as well as to stop; this you can do by touching him sharply on the heels with the whip. Always use common sense in the use of the whip and do not slash and welt him all over the body. You had better have no whip at all than to use it injudiciously.

When you command a horse to move forward never repeat the command, and if he refuses to start promptly, then touch him keenly on the heels with the whip.

Now, your colt is taught to turn to the right or left, and stop readily at the word of command. And when he does stop go up to his side quietly and gently, pat and rub him, showing to him that when he obeys your command you will treat him kindly, and if he refuses to obey, you will punish him by jerking the lines.

The next operation with the colt will be to get him accustomed to the sound or crack of the whip.

This you can do in a very few minutes by taking hold of the end of the lines in one hand, cracking and snapping the whip with the other. Allow me to say here, that your lines should be sewed together and not buckled, as the buckle will have a tendency to tear and cut your hands.

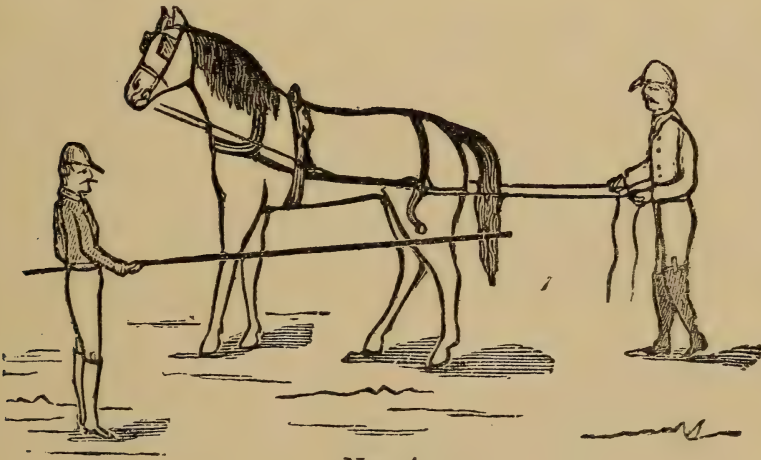


Every time the colt starts forward jerk sharply on the lines, and he will soon learn to stand quietly while the whip is being cracked about him.

Every time he stands quietly while you are cracking the whip, approach and caress him.

When this is accomplished and you can hold him with perfect ease, we have another lesson to impart to him.

Let your assistant take hold of the long pole and stand in the center of the corral, while you drive the colt around him. Have your assistant touch him quickly on any part of the body with the end of the pole. [See cut No. 4.]



No. 4.

This will represent some break-down, and be very likely to frighten and startle the colt again.

Stop the colt as soon as possible, keeping your assistant still touching him lightly with the end of the pole. Start up your colt again, and repeat this until he submits to being touched with the pole.

While he is in motion, walking around the corral, touch him lightly with the pole on the legs and belly, getting him accustomed to being touched all over.

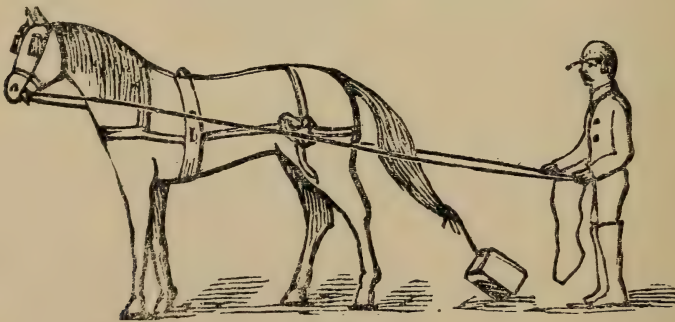
This lesson is to prepare him for receiving the shafts, and he should be handled thoroughly with the pole in every place where the shafts and cross-bar would be likely to touch him, even in the case of an accident, as this treatment is really to guard against accidents that may occur at any time after he is hitched up.

Always be sure that you can hold your colt when he is excited or frightened.

Most any person can hold a colt that will not try to get away; but you want to be able to hold him when he is trying his best to get away.

After the colt has submitted to all of the above treatment and goes along kindly and gently, it would seem as though he was ready to be hitched up.

You will bear in mind, however, that thus far the colt's senses have been but partially educated. Now take an old tin can of any kind that will make a noise; tie it to the hair of his tail and allow it to drag behind him, so as to accustom him to the rattling of a wagon or any other noise likely to be made while he is on the road. [See cut No. 5.]



No. 5.

Drive him around on a walk at first, then in a trot. If he attempts to run away, stop him as quickly as possible, and bring him to a walk again.



Repeat this lesson until the colt has become familiar with the noise made by the tin can tied to his tail.

Always have the can tied far enough from his heels so it will not become tangled about his legs.

The next lesson to teach the colt will be that of becoming accustomed to the sight of an umbrella, or anything likely to meet his gaze suddenly on the street and frighten him.

This can be done in a few minutes, by letting your assistant take an umbrella, opening it suddenly in front of him while you are driving him around the corral.

If he whirls and attempts to run away, straighten him up quickly with your lines and make him go past the umbrella.

Repeat this until he becomes accustomed to the sight of the umbrella. Then we have him educated to understand the sight, touch and sound.

This lesson will be sufficient for the first day.

If the colt, during this training, should get into a profuse perspiration before putting him away, it is essential that he should be "scraped out" and rubbed perfectly dry, and good care taken to prevent his catching cold.

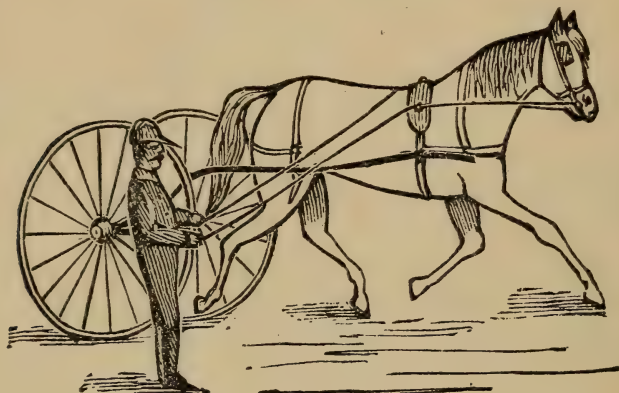
The next day, take the colt into the corral and harness him, and commence to train where you left off, driving him around, testing him with the pole and can.

If he is easily handled and managed, after handling him a few minutes, he will be ready to hitch into the shafts or alongside of another horse, as the trainer may think best.

We always prefer hitching them in shafts first while in the training yard.

Where the colt is hitched to the cart, as explained in another part of this book, you will see the breeching strap is not fastened, but hanging loose, as represented in cut No. 6. This is done so that the cross-bar of the shafts will touch him when he stops, in fact, when you put the colt in the shaft for the first time you should allow the cross-bars to

touch him, and if it seems to alarm him, he needs more training with the pole before he is hitched in to prepare him to receive this unusual touch without becoming frightened.



No. 6.

A colt handled this way for one hour—say, half an hour each day—will be better broken and safer than if handled in a gentle, quiet, easy manner for six months.

We believe that it is necessary to test the colt in every conceivable manner before risking our lives behind him in a buggy or a wagon.

On the same principle, the boiler on a steamboat is tested by the Government Inspector, by putting on a cold-water pressure before getting up steam, to ascertain whether the boiler has the requisite strength to resist the pressure brought to bear on it by future use.

If it will stand the cold-water pressure, which is greater than that produced by steam, the Inspector pronounces it safe, and then, and not until then, will the owners be permitted to get up steam and run the vessel.

On the same principle, we consider it safer to “test the colt” in every conceivable manner to guard against serious accidents that are likely to occur every day with a colt that is handled in the old-fashioned way.



When the trainer has hitched the colt up, and is driving him on the road, it will be necessary, for a few days, to watch his every movement closely.

If he should attempt to kick, run, or do anything that is objectionable to the trainer, punish him with the bit, and he will soon learn to act right, because he is punished only when he does wrong.

A colt will often kick, strike or bite as a means of protection to himself, and not because he is naturally vicious; and the trainer must remember that the colt was not made for the harness, but the harness was made for the colt.

There are a great many people under the impression that the colt was made for the saddle, harness and bridle. This is a mistaken idea. The saddle, harness and bridle were made for the colt, and when we put them on him, we violate the laws of nature, and as self-preservation is one of the laws of nature, the colt may kick or attempt to run, in order to protect himself.

In order to illustrate this, we will say:

If a fly should alight on the horse's neck he will shake his head to remove it; if it alights on his breast he will put his mouth down to bite it off; should it alight on the side of his body, he will put his head around to do the same thing; if on his front leg, he will stamp his foot on the ground quickly; if it alights on his rump, he will switch his tail and sometimes kick up; if on the hind leg, he will kick with his hind foot to remove it.

If we take a pin and prick him lightly, he will do the same as he did to remove the fly.

So that should any other object touch him he is likely to do the same in order to protect himself. Hence the necessity of accustoming the colt to the sense of feeling, hearing and seeing, as directed in the preceding lesson.

## A RUNAWAY HORSE.

First find out, if possible, what caused him to run away; and when the trainer has found out, take him into the lot or corral and tie him, head and tail, with the halter, and handle him with the pole, as directed in the lesson for training the colt. Whatever has been the cause of his running away will frighten him the most; so that it will be necessary to operate more on this point than any of the others; and when he submits to the sense of feeling, seeing and hearing, put the harness on as directed in the lesson on the colt, and handle him in the same manner as the colt was handled, until you can hold him by the lines with perfect ease, while the assistant is exciting him with the pole, umbrella, or any other object which would have a tendency to make him run away.

The trainer will remember that it will be necessary to get the mouth so that he can hold him with perfect ease before undertaking to excite him to resistance.

At this point we will state that there is no man who can hold a horse by main strength; hence the necessity of giving him thorough training with the lines and bit, as directed in the training of the colt's mouth.

Teach the horse to start and stop well, even under excitement, and repeat this lesson two or three times before hitching him up.

In ordinary cases this will take from thirty to forty minutes, to give the horse a good lesson—always being careful to take good care of your horse on concluding your lesson.

## KICKING HORSES.

A kicking horse is one of the most dangerous horses we have, and in a very bad case is considered almost worthless.

While I was traveling through Richmond, Virginia, a very ugly kicking mare was brought to me, that had been



traded from stable to stable until she was considered as worth very little money.

A gentleman—one of my scholars—asked me one day if I thought she could be broke, and I replied:

“Yes—certainly she can.”

I think she was one of the worst mares I ever came across in my travels of over eighteen years.

I gave her a short lesson, lasting thirty minutes, every day for a week, and some of my scholars began to talk as though my plans would not work on her.

On the seventh day she gave up, and I told the owner to take her and hitch her up and drive her, which he did.

He drove her himself for about one week. I stayed in Richmond four weeks, and when I left there his man was driving her all over the city, delivering groceries.

Another bad kicker, in Virginia, I met at Woodstock, where I formed a class.

The subject furnished me to handle was a gray horse, fifteen years old, that the owner told me had been kicking all his life, and had been traded around from one horseman to another, until it was considered impossible to drive him in harness.

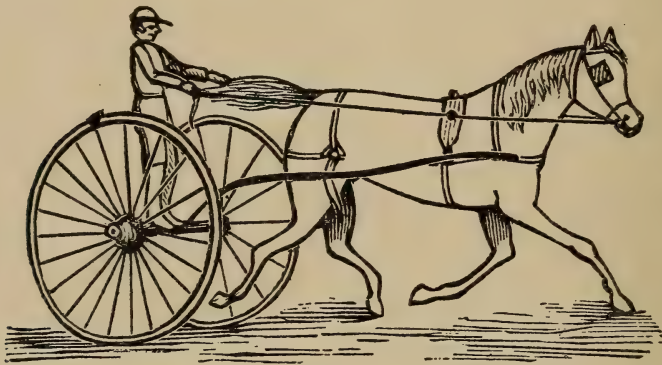
We commenced with this horse about four o'clock in the afternoon, before the class, and worked with him until six in the evening. Myself and assistant worked on him faithfully, using our best efforts, and some of the class went off with the impression, when we adjourned at six o'clock, that he could never be broken.

The owner of the horse, a hotel-keeper, and others who were deeply interested, turned out again the next morning to see us handle the horse.

When we commenced on him—after putting on the harness—every time we would touch him with the pole he would kick, and every time he would kick we would punish

him with the bit, until finally, after a hard fight of two hours, resting occasionally to get our wind, he quit kicking, to the great astonishment of all present except myself and assistant.

We drove the horse, without breeching, to a two-wheeled cart, standing on the axle and holding the horse by the tail. [See cut No. 7.]



No. 7.

Every time we stopped him, the cross-bar of the shafts would bump up against him. This was in the fall of 1876, during the Presidential campaign.

I was advertised to perform at Stanton the next day, and had to leave Woodstock.

While in Stanton, I got a letter from the owner of the gray kicking horse of Woodstock, stating that he had driven the horse, with his family in the wagon, and if I would return to Woodstock he would give me a certificate that would carry me triumphantly through the valley.

I relate these two extreme cases for the purpose of encouraging the trainer, should he meet with such brutes as I have mentioned.

No matter how mean and obstinate they may be, you can conquer them by persevering in this treatment, and the



average kicking horse, by this treatment, can be controlled in from thirty to forty minutes.

We could mention hundreds of such cases, but have selected these two because they were the worst we have met in all of our travels.

The horses above mentioned should receive the same treatment as recommended for the breaking of the colt.

In fact, there is but one way to break a horse of any bad habit in harness, and that is to treat him kind and gently when he does all that we require of him, and punish him when he refuses.

### BALKY HORSES.

The balky horse is the one that will try the horseman's skill, power, ability and temper more than all the kicking, runaway, bucking, striking, biting, and shying horses, or any other kind of horse that we can think of.

There are several kinds of balky horses.

There are those that will not go in any harness, light or heavy.

Then, again, there are horses willing to go in a light vehicle, but will refuse to pull an ordinary load. There are some that are hard to start from the stable or lot, but will go along all day after they are started; there are horses willing to go straight ahead on a road, but if you wish to turn them to the right or left, they will stop—these we call "bridle balkers."

In fact, any horse is a balky horse when he refuses to go when and where we direct him to go. To break him and make him a true and valuable horse, we will begin with him the same as though he was a green colt, and put him through the same training and lessons as are directed in breaking the colt, always being careful to keep the point we gain in working with him, until we have the complete mastery over him on that point, never expecting him to pull all he is able to at the first lesson, but beginning with a light

load, and gradually increasing it until he gains confidence in himself. Then he will pull all that any ordinary horse ought to pull.

The first point to be gained with a balky horse in giving him his lesson, is to teach him to start and stop, turn to the right or left, go forward or backward at the command of the trainer. This you want him to do before you hitch him to the cart. And when you do hitch him in, be careful not to have the cart too heavy. A two-wheel cart is the best.

The kind of cart I use in hitching the colt or horse to, the first time, is simply two wheels and an axle, without any seat, and a good pair of buggy or express-wagon shafts. This cart will be illustrated in Cut No. 7, page 18, showing the breaking of the colt.

We never use this cart except in the training-yard, and then for the purpose of getting the colt used to shafts and load.

We can teach the horse to pull by strapping one of the wheels to the shaft, after he goes well with the wheels loose. Sometimes we fasten both wheels in this way, and we can increase the weight as we feel disposed, by tying an empty sack to the axle, and throwing in a shovel or two of sand or dirt at a time, in proportion to the amount that the horse will draw. In this way, the wheels, being locked, we can make as heavy a load as is necessary, by adding sand and dirt to the sack. Stop and start the horse often while hitched in this way, always encouraging him by kind treatment when he obeys promptly.

When you come to a hill, or any place where the horse refuses to go, after making a short effort to start him, should he still refuse, take him right out of the cart or vehicle, put the lines through the shaft-tugs and drive him up and down the hill and all around the place he refuses to pass with the cart.

By passing the lines through the shaft-tugs you are able to keep his head from you and his tail toward you, thus



preventing him from turning around and twisting the lines out of your hands. Should you leave the lines through the rings of the saddle as they were when you were driving in the cart, he would perhaps whirl around and twist the lines around his body and out of your hands, and in some cases get away and give you considerable trouble.

While in Chambersburg, Penn., a very eminent physician brought a balky horse to me to have him broke. After giving the horse one lesson, my assistant was driving him on the road hitched to a buggy, and he stopped at the foot of a hill, refusing to go any further.

He took the horse out of the shafts and fixed the lines as directed above, and drove him up and down the hill several times. At this moment the doctor happened to come along and asked him what he was doing with the horse. He replied:

"I can manage the horse better than I can the horse and buggy, hence I leave the buggy on the roadside until I can get the horse to go without it. In other words, if the horse refuses to go when there is no buggy hitched to him, there is no use to hitch him to it. Always break your horse first and the buggy afterwards, and never undertake to break the horse and buggy at the same time."

In conclusion, we would say that this is the simplest and most lasting way to manage a balky horse.

We could give various methods for starting the horse as laid down by other trainers, but to start a horse when he is "balked," or to make him pull at one time, will not make him start or pull at all times.

We must be able to teach the horse that he is what he was intended to be, man's willing and obedient servant at all times and places and under all circumstances.

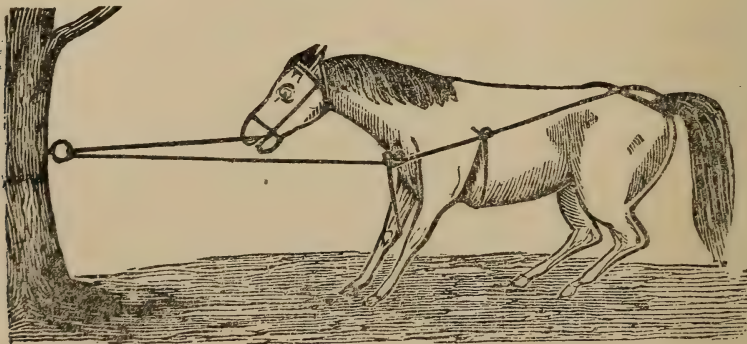
In a figurative way of expressing it, we must make him believe that we can put him through a knot-hole, and when we get him through the plank, show him by our actions that we are not only his master, but also his best friend.

## HOW TO BREAK A BAD HALTER-PULLER.

Of all the objectionable tricks and bad habits the horse is subject to, one of the worst is that of pulling back or "halter-breaking," and has, perhaps, been the cause of a greater number of accidents than any other, and causing the destruction of numberless bridles, halters, etc.

To break a horse of this habit properly and for all time, the first thing would be to investigate the cause, or why the horse pulls back on the halter. His natural instinct is to refuse to be held by the head. When the animal's head is fastened he will make an effort to get loose, and as long as he finds he is successful in getting loose he will continue to do so. Therefore, should he set back on the halter and attempt to get loose—his head being in a trap prepared for him, by the art of man—he will naturally pull to get his head out, and if any part of the halter should give way or break, his head will become free, and every time he gets free by pulling, he will be encouraged to pull harder the next time, until it will take a very strong halter to hold him, especially if he is a large, heavy horse.

There are various plans devised for the breaking of this habit.



No. 8.

Cut No. 8 represents a horse pulling on the halter while fastened according to my method of breaking this habit.

Take a half-inch rope fifteen feet long; double about one-half of it, and put the doubled end under the tail for a crupper, wrapping a piece of cloth around the crupper part to prevent the rope cutting his tail.

Pass the longest end of the rope around his neck from the off to the near side; tie it to the short end in a flat knot on the near side, and have the knot come about where you buckle the girth of the harness. Then take the long end and place it under the belly and tie it to the rope on the off side. This will make a girth or belly-band to prevent it from slipping up. When the rope is placed on in this way, as shown in cut No. 8, put on a strong rope or leather halter; take the lead of the halter, running it through a ring in the manger, tree, or side of the building. After running the lead of the halter through the ring fastened to either of the places named, tie the end of the lead to the rope in front of his chest, as shown in the cut.

Now the horse is not only hitched by the head, but to the rope running under the tail also; and when he starts to pull, the lead of the halter will slip through the ring. The rope will then catch him under the tail, and he will soon jump forward to relieve the pressure under the tail. When he does this, go up to his side near his head, patting him gently on the neck, allowing him to stand a few minutes; then take a cane or stick and, running up quickly to frighten him back again, and should be run back, strike heavily on the lead of the halter in front of his head until he jumps forward.

When he comes forward again treat him kindly as before, repeating this operation several times until he refuses to pull back. If the horse is afraid of an umbrella, blanket or anything of that kind, run towards him with the object in your hands and try to frighten him back, and when he comes forward repeat the rubbing on the neck as before, or until the horse refuses to pull or tighten on the halter. After this lesson he can be hitched at night in the stable without any danger of hurting himself.



This treatment will break the most confirmed "halter-puller" in existence after giving him a lesson lasting half an hour as above for one or two days.

If he pulls on the bridle and not on the halter, make a strong rope bridle and hitch the same with the bridle as you do for "halter-pulling" by running the rope lines through the ring and tie to the rope in front of the chest.

### DIFFERENT DISPOSITIONS AND TEMPERAMENTS OF THE HORSE.

The lesson on the management and training of the colt and horse would be incomplete without calling the attention of the pupil to their different temperaments and dispositions.



No. 9.

While all horses are governed by the same fixed laws and instincts, their temperaments and dispositions are as varied and numerous as those in man.

Some are naturally very quiet and gentle in their dispositions, so much so that it would appear as though they would never do anything wrong, but, by improper management on the part of the trainer or owner, they may become so vicious and bad as to make them almost as worthless as the horse Cognac, well known all over California, that became so vicious and unmanageable, that when he got loose and out of his stall, on the Fair Grounds of Petaluma, Sonoma County, he killed a man who undertook to return him to his stall.

This horse at one time was as tractable and gentle as it was possible for a horse to be, but by the improper treatment he suffered at the hands of his groom, while in Illinois, he became very vicious and unmanageable.

The groom, in order to show the intelligence of the horse, would put his arm up to the horse's mouth, coaxing him to take hold of it, in the same way as is often done by foolish people, who are not thoroughly conversant with the habits of the horse. In doing this, the groom succeeded in getting the horse to bite, or pinch him, on the arm, with his teeth.

One day Cognac bit him harder than usual. This enraged the groom, and he took the horse out of the stable and began to whip him in an unmerciful manner about the body and legs, until the horse lay down, squealing from the pain inflicted by the groom. And when he got up, the once gentle and kindly-disposed horse was transformed into a demon, with a disposition to eat up and destroy his master, who had wantonly and cruelly beat him, or any one who attempted to manage him.

It was considered, by numerous judges, that this horse had no sense, as the term is generally used among horsemen, but the writer looks upon this horse as having more sense than if he had allowed the groom to punish him wantonly and cruelly for doing that which he—the groom—had taught him to do, without making an effort to retaliate.

I was in Chicago in 1880, and my attention was called to another very bad horse, called the Duke of Normandy, that had previously got his groom under his knees and chewed him up, and had crippled and injured several other men.

He was led about from one stand to another by a jockey-stick, fastened to the bit, in order to prevent his jumping on the groom and killing him.

If the groom, having him in charge, should get on his back to ride him, he would reach around and bite him on the leg, consequently they were obliged to walk and lead him.

The owner of this horse lived at Norwood Park, about eleven miles from Chicago. I went one day to see him concerning his horse, and, in the course of conversation, I found that the horse would make a good subject to handle before my class, and the gentleman had him brought to my tent in Chicago, and in less than forty minutes from the time I began to handle him, the owner was on his back, riding around the ring, and the horse was perfectly gentle and quiet. I hitched this horse to a buggy and drove all through the city of Chicago, with perfect safety, also turned him loose in my ring and had him follow me around, without halter or bridle, perfectly quiet and gentle.

This horse was about seventeen hands high and weighed eighteen hundred pounds, and was naturally of a mild, even temper.

On investigating the early history of this horse, I learned that he was imported from France at the age of two years, and was perfectly kind and gentle, until he was spoiled by the unskillful management of his groom.

We could mention many such cases of good-tempered horses having been ruined and made ugly by mismanagement on the part of grooms and others.

Then again there are other horses that are naturally stupid, sullen, and of treacherous dispositions. [See cut No. 10.]



These horses will require very little aggravation at the hands of the trainer in order to draw out their mean traits.

If they are of the balky or sullen order, great pains should be taken by the trainer to overcome this as much as possible by studying how to get the best of them, and not allowing them to gain any points.



No. 10.

They will often attempt, while the trainer is handling them, to do just the reverse of what is required of them. This we must never allow them to do, but must work on that point constantly and firmly until they do as we are trying to teach them. Always treat the horse with kindness when he does that which we demand of him. If he is of a treacherous disposition, be very careful and see that he gets no advantage of you. Always be sure that you have every advantage on your side.

Some people are of the opinion that a horse knows when you are afraid of him. He knows nothing about your thoughts. He only knows what you can do with him, and

if you should undertake to handle him and he finds out by experience that he can handle you, he will continue to do so as long as he finds your inability to force his submission. As soon as he finds your ability to force submission he will yield at once to your commands. I have handled hundreds of horses and made them perfectly submissive when I have been very much afraid of them. I have heard men say they never saw a horse they were afraid of. A man that will stand behind a horse and let him kick his head off has not as much sense as the horse. Always use great care and judgment in handling horses like the ones I have alluded to.

There is another class of horses that are of a nervous and high-strung temperament [see cut No. 11], that will fight



No. 11.

and resist every effort to confine them. While in San Bernardino, California, I came across a horse of this kind. He had been caught up wild, and resisted every effort made to domesticate him.

When I commenced to handle him in the way and manner I have laid down in the lesson for training the colt, he acted more like a hyena than a horse. Some of my class said he was crazy or "loco," as it is expressed in that locality—this is a Spanish word for crazy. One of the class said he knew the band from which this colt was taken and that every one of them was "loco."

After I had handled him about thirty minutes he gave up the fight from the fact that he found out I was not going to hurt him. The next day I drove him on the streets, and he acted like a good, sensible horse, and showed no signs of being "loco."

When I first came to California advocating my new system, there were quite a number of good horsemen who said:

Perhaps this man can handle the Eastern horses that are domesticated, but we don't think he will meet with much success in handling our "broncos."

But after staying in Los Angeles six weeks, handling their "broncos," and driving them through town with tin cans tied to their tails, they became satisfied that my system would break wild horses as well as those domesticated, as this article of January 2d, 1882, from the Los Angeles Times, will prove:

The citizens of Los Angeles witnessed one of the most interesting processions that has paraded the streets of this city for many a day, yesterday. For some time past Professor Sample has been in this city teaching the lovers of that noble animal, the horse, how to train him. From the exhibition yesterday it was fully proven to the satisfaction of the most skeptical that Sample is the most thorough horse-trainer in the United States, if not in the world. The owners of the horses in the procession will testify that less than thirty days ago every animal was ungovernable to a considerable extent. But the reader, if he saw the parade, noticed that every horse was led by boys not over twelve years of age. This is proof positive that every man should understand the *modus operandi* of taming horses. The procession started from Temple street stable about 12 o'clock noon, and marched through the principal streets. The Pro-



fessor led the caravan, seated in a fine buggy drawn by two magnificent black horses. The City Band followed; then came the riproaring mustangs that had been trained. The first one had a motto on his sides which read: "I was the boss of Denker's ranch, but Sample got the best of me." Then followed nine horses with mottoes which read like this: "I was the bucking bronco, that had my tail full of cuckold burrs and I have been Sampled;" "I was a nullifier, but have been conquered;" "I was Wild Bill of Temple street stable;" "I was the worst pill in the box, but Sample got the best of me;" "I was a balker, but Sample made me go;" "I wouldn't back, but I do now;" "I am the one that crippled my master and killed my mate, but will never do it again." The last one had: "I was a high kicker, but Sample took it all out of me."

#### TO BREAK A HORSE THAT IS AFRAID OF A LOCOMOTIVE.

A horse that is afraid of a locomotive is a very unpleasant kind of horse to drive, and can be broken of the habit in a short time. One of the instincts of the horse is to be afraid of anything he does not understand; in fact, fear, either directly or indirectly, is the cause of all bad habits.

The natural instinct of the horse is to follow after any object he may not understand, providing the object is moving from him; therefore, instead of forcing the horse up to the object when it is moving toward him, be it locomotive or what not, get the horse in a position that you can ride or drive him after the object.

If he is afraid of a band of music that is coming toward him, it will be best to take him around in some way and get in the rear of the band. In this way he will become familiar with the noise while following it. This is what we call educating the sense of hearing. If it is something that frightens him when he sees it, get him accustomed to the sight of it in the same manner that you accustom him to the sound—by letting him follow after it.

By way of illustration: a horse will follow a top-buggy on the road or street without becoming frightened, but should the same buggy approach him or come up behind him, he will become frightened, and thereby, obeying his natural instinct in attempting to get away from an object he does not understand. A couple of gentlemen, who took lessons from me some years ago, while I was illustrating this point, one said:

“That’s so.”

He went on to state to the class: “When myself and companion were traveling out West, we came up with a band of wild horses, and they followed us at a distance for two days; sometimes we would turn our horses around and start toward the band to get a good look at them, and they would invariably turn and move from us, but when we resumed our journey the wild horses would again follow us, always keeping off at a safe distance.”

So, in accustoming a colt or horse to any object that would be inconvenient to use in the training-lot, proceed as directed above. In fact, to break a horse of any bad habit, such as shying on the road, refusing to stand quietly while being hitched or unhitched; being restless while you are getting in or out of the buggy, rearing up, running backwards, jumping over things in the road, or, in fact, any bad habit that the horse is subject to, can be thoroughly eradicated by putting him through a thorough course of training, as directed in the handling of the colt, thus getting him under your control.

Never go into partnership with your horse, or compromise with him when he disobeys, but let him know that you are what you were intended to be—his master—and he your servant.

After giving your horse a thorough course of training, if you ever have got into the miserable and uncalled-for habit of trying to make the horse go by jerking on the

lines, as most ladies and quite a number of gentlemen do, by all means desist at once and never repeat it. The main object is to be uniform in your language and actions toward him. Never say whoa! to him unless you want him to stop, and if you should happen to say whoa when you did not want him to stop, stop him.

If you tell him to go and he refuses to obey, touch him with the whip, but do not jerk on the lines. By giving him the above lesson he will soon understand your commands, and will act promptly. You should be careful and not pull much on the lines, for his mouth will be a little tender after the lesson. Never use a severe bit, as it is unnecessary. The plain-jointed bit will be sufficient to hold any horse if he is properly drilled. Some people make their horses foolish by holding the lines tight when the horse starts.





No. 0.

## HOW TO TELL A HORSE'S AGE TO HIS TWENTY-FIRST YEAR.

---

There are few persons, even among veterinary surgeons, who are able to tell the exact age of a horse after he has attained his tenth year, and this being the case, how can we expect those who have neither anatomical nor physiological knowledge of the mouth to tell his age?

Horse-dealers are frequently accused of deceiving their customers in the age of horses. The purpose of this lesson is entirely to set aside this deception, and to enable all, sellers, buyers, and those who never before knew anything about the age of horses, to thoroughly understand the age of all horses, from the time of foaling until he has reached his twenty-first year.

The writer, who has theoretically and practically studied the horse's mouth for eighteen years, has had opportunities of examining the mouths of thousands of horses of all ages, thus thoroughly convincing himself of the reliability of the rules he has laid down for telling the age of the horse.

He has been teaching this new system for nearly ten years, and has taught thousands of persons, and caused numerous discussions upon the subject.

While in Terre Haute, Indiana, there was no little excitement created by the teaching of this system. In fact, some of the horsemen who were skeptical on the subject, wrote to Wilkes' Spirit of the Times to ascertain if it were possible to tell the horse's age up to twenty-one years. The answer came, "No," with a long explanation, giving many reasons why it could not.

The principal point presented in Wilkes' argument was that the cups or marks entirely disappeared in the teeth at nine years of age; and that, after the cups or marks were gone, it was impossible to ascertain with any degree of certainty how old the horse was.

(Every new invention, idea, and system of teaching any science or art, must have a discoverer or inventor; and as these new ideas, systems, and inventions are made public, there is, of course, much discussion, criticism and opposition created by those familiar as well as by those unfamiliar with the subject.)

The writer contends that the horse's mouth undergoes a continual change from the time he is foaled to the day he dies; and that it is much easier to determine his age from ten years up to twenty-one than it is from one to ten, and we feel confident that we will be able to substantiate these statements as we proceed with the lesson.

The horse has forty teeth, and, as we use only twelve of them to determine his age, we will have very little to say

about the other twenty-eight, as it will have a tendency to confuse the reader. The twelve teeth we use to tell the age are located in the front of the mouth, six on the upper and six on the lower jaw. [See cut No. 1 of lower jaw of foal six months old.]



No. 1.

Outside view of a six months old colt's lower jaw.

We will name these teeth "nipper," "middle" and "corner" teeth—NN, the nippers; MM, the middle; CC, corner—as marked on the teeth in the cut.

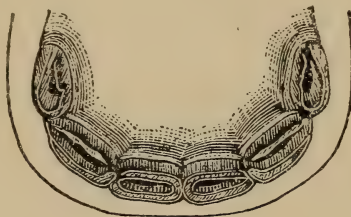
The upper jaw has six teeth—the same as the lower. The cut simply represents the lower jaw, front view. There are six on the upper jaw that will be understood by the same names—nipper, middle and corner. The nipper, middle and corner teeth of the upper jaw will come directly over the nipper, middle and corner teeth of the lower jaw.

These twelve teeth are all that we use to determine the age of any horse, mare, mule, jack or jenny, and the first thing for the reader to do will be to familiarize himself with the names and location of these teeth—nipper, middle and corner, or N, M and C; so that, when we speak about nipper, middle and corner teeth, the reader will know just where to look in the horse's mouth for the teeth we are speaking about.

The rule we lay down for telling the horse's age applies to the mare as well as the horse. Mares do not generally have canine or hook-teeth, commonly called tusks or bridle-teeth.



This is one of the reasons for discarding those teeth in determining the age, as it would have a tendency to deceive or mislead the pupil. [See cut No. 2.]



No. 2.

INSIDE VIEW OF THE LOWER JAW OF A FOAL'S MOUTH AT SIX MONTHS.—By looking closely at this cut it will be perceived that both the outer and inner edge of the nipper are worn, while only the outer edge of the middle is worn off, and the corner teeth have not yet come in contact with the upper jaw.

The average time for the foal to get his first four teeth, called nippers, is fourteen days. He gets the next four, called middle, between fourteen days and three months. Between three months and six months he gets the last four, called corner. So you will understand by this that the colt, at the age of six months, has twelve teeth. These are all the teeth we use to tell the age.



No. 3.

The colt's teeth as they appear when drawn out of the jaw.

This will represent six colt teeth as they would appear if pulled out of the jaw. The three on the left, marked H, represent the outside view of the crown. The three on the

right, marked E, represent the inside view of the crown of the teeth. G represents the roots of the middle and corner teeth, from an inside view, and I represents the outside view of the roots.

By this cut the pupil will readily understand the anatomical structure of the colt's teeth. These teeth will all disappear from the colt's mouth between the age of two and five years.

By carefully noticing the ends of the teeth in cut No. 2, you will see that the crowns or part that the colt eats with has a hole or mark inside, and by the upper and lower jaw coming in contact with each other causing the teeth to wear off at the crown. These cups or marks will disappear at the age of one year from the nippers of the foal. [See cut No. 4.]



No. 4.

This is the inside view of a colt's mouth one year old.

The middle and corner teeth still retain the cups or marks. When we look for the cups in the colt or horse, always look on the lower jaw, because the lower jaw is movable and the upper is stationery and never moves except when the horse moves his head.

For this reason there will be more friction on the lower jaw than on the upper, hence the lower teeth will wear away sooner than the upper, and in looking for the marks or cups in the crown of the tooth always and invariably look on the lower jaw.

Cut No. 5 represents the lower jaw of a two-year-old, in which the edges of the nipper and middle teeth and their marks or cups are worn down, and the inner edge of the corner tooth is just commencing to wear.



No. 5.

Inside view of a two-year-old, when the cups are worn off of the nipper and middle, a small cup remaining in the corner teeth.

At the age of two years and a half the colt teeth commence to drop out and horse teeth take their place; this we call shedding the teeth.

There is a difference between the teeth naturally shedding and being knocked or pulled out.

Sometimes they are pulled or knocked out for the purpose of representing the animal to be older than he really is.

During the late war between the North and South there were a great many mules sold to the government that had their nippers pulled out, sometimes at the age of eighteen months, to make them appear as being two years and a half old, this age being the youngest at which the government would receive them. And thousands passed into the government employ for mules that were "coming three years," when really they were only from a year to eighteen months old.

While in Chicago I frequently visited the sales-stables. On one occasion I was an eye-witness to this circumstance:

A gentleman, wishing to purchase a horse, inquired the age of a fine large colt some sixteen hands high. The dealer



informed him that the colt was five years and two months old. Out of curiosity I ventured to examine the colt's mouth, and found it was only three years old.

The dealer's object in representing the colt to be five years old when he was but three was that the purchaser desired a horse of suitable age for work, whereas a three-year-old would not answer.

Had the Government Inspectors of horses and mules known that the animals brought to them were but eighteen months old instead of two and one-half years, they would have refused them as unfit for the work required. Had the Government Inspectors and the Chicago man we have alluded to been familiar with this method of telling the horse's age and the anatomical structure of the mouth, it would have been impossible for them to have been deceived as to the age of a horse.



No. 6.

Inside view of lower jaw, when two and a half years old, with the horse-nippers just coming through the gum.

Cut No. 6 represents the lower jaw two years and a half old, with the colt teeth called "nippers" shed out, and the horse teeth of the same name have taken their place.

It will be seen, by carefully examining the above cut, that the horse teeth now coming in have not filled up all the vacancy in the horse's mouth caused by the shedding of the colt teeth.

When the horse teeth on the lower and upper jaws come in contact with each other, and are worn perfectly straight across the crown, so as to fill up all the vacancy caused by the colt teeth "shedding out," the colt will then be three years old. At this time the colt will have four horse teeth and eight colt teeth. In other words, the nippers above and below will be horse teeth, while the middle and corner teeth above and below will be colt teeth.



No. 7.

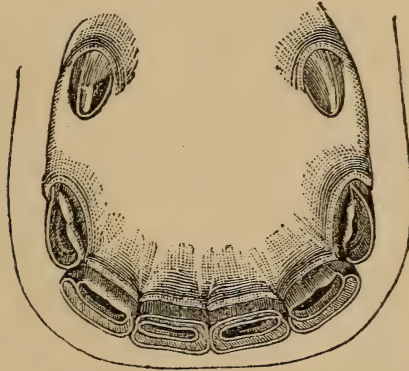
Inside view of the lower jaw, three years and a half old.

The way we distinguish the horse teeth from the colt teeth, is by the horse teeth having a groove running down the center of the tooth from the crown to the gum on the outside surface, while the colt teeth are smooth on the outside surface, resembling your finger-nail, as shown in Cut No. 1.

Cut No. 7 represents the lower jaw of a colt three years and a half old.

The colt teeth, called "middle," are gone, and the horse teeth have cut through the gums. At four years old, these horse teeth, called "middle," shall have filled up all the vacancy, and be perfectly straight across the crown. Then the colt will show four horse teeth on the lower and four on the upper jaw, with only four colt teeth remaining, namely, the four "corner" teeth. When the colt is four years old, it will be seen, by a close examination of the colt's mouth, that he will have eight horse teeth and four colt teeth; the four nippers and four middle will be horse teeth, showing a groove on the outside surface; while the four corner teeth

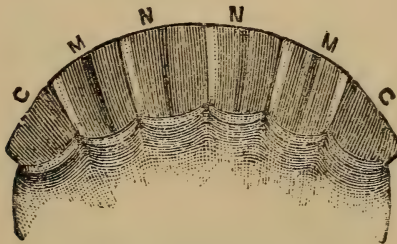
that remain in the jaw will be colt teeth, with no groove on the outside surface, and the crown of the tooth will be worn perfectly smooth, as represented in cut No. 7.



No. 8.

Inside of the lower jaw of a colt four years and a half old, with the tushes and corner tooth through the gum.

Cut No. 8 is a representation of the lower jaw of a four-and-half-year-old colt. It will be seen by the above cut that all the colt teeth are gone, but the corner teeth are not yet fully developed. These corner teeth will be full size at five years. Then, all the teeth, nipper, middle and corner, will be horse teeth, and will all show the groove on the front except the corner teeth.



No. 9.

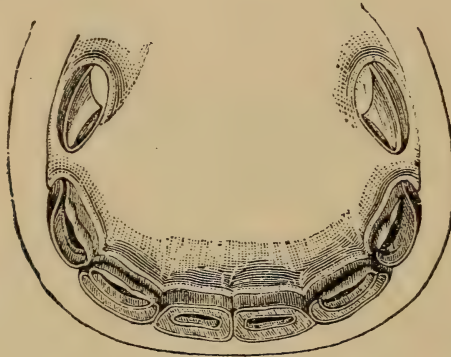
Outside view of lower jaw at five years of age.

The above cut is a correct likeness of the outside view of the lower jaw of a five-year-old horse, showing the grooves



in the nippers and middle teeth, while showing the corner teeth as smooth. The corner teeth of the upper and lower jaw at five years are just commencing to wear, and it will be seen by Cut No. 9 that the corner teeth are wider than they are long.

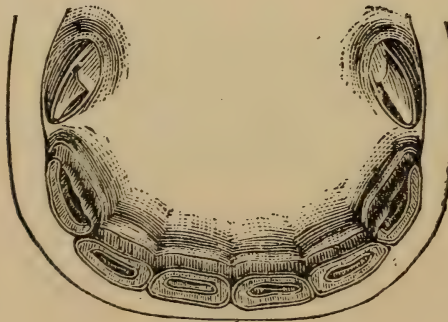
The length of the tooth is from the gum to the crown, and the width is across the crown. The tooth marked c is wider than it is long.



No. 10.

Inside view of the lower jaw at five years.

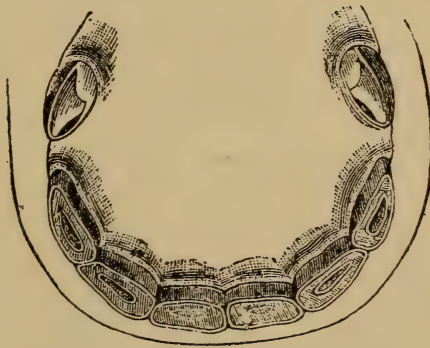
This cut shows the inside view of the lower jaw at five years of age. There is but slight difference between this and the six-year-old.



No. 11.

Inside view of a horse's mouth at six years.

Cut No. 11 shows the lower jaw of a six-year-old horse. By examining this cut it will be noticed that there is a large cup in the corner teeth, and a small one in the middle teeth. The cups have almost disappeared from the nippers, and sometimes at six years the cups are gone entirely from them, which would represent a seven-year-old horse. But if the pupil has a doubt as to the horse's age he can determine by the examination of some of the other teeth. We have shown that the corner teeth at five years old are wider than they are long, and until the horse has passed six years of age the upper corner teeth, on both sides of the jaw, will show wider than they are long. The horse will not be over six years old, although the cups may have disappeared from the nippers of the lower jaw.

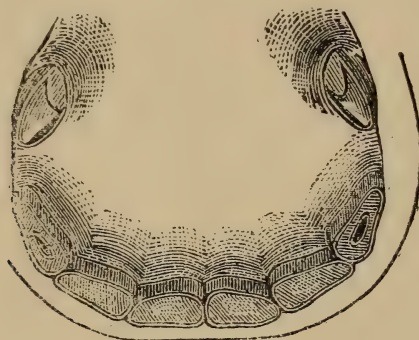


No. 12.

Inside view of horse's mouth at seven years.

Cut No. 12 represents the inside view of the lower jaw of a seven-year-old horse. It will be noticeable that the cups are entirely gone from the nippers, and almost gone from the middle, while the corner-teeth are worn dull on the inside. At this time the upper corner-tooth will show longer than it is wide. This is the only difference perceptible between the six and seven-year-old horse.

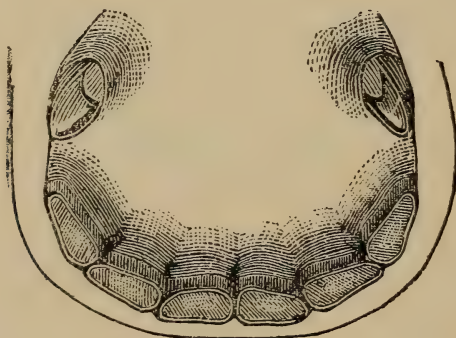
Cut No. 13 shows the lower jaw of the horse, aged eight years, in which the teeth have all become equally worn, and in the corner-teeth alone is to be found any trace of the



No. 13.

Inside view of a horse at eight years.

cup. The lower jaw will be smooth at this time except the corner-teeth, which will show a small cup.



No. 14.

The above cut shows the lower jaw of a nine-year-old horse, where all the teeth have become smooth.

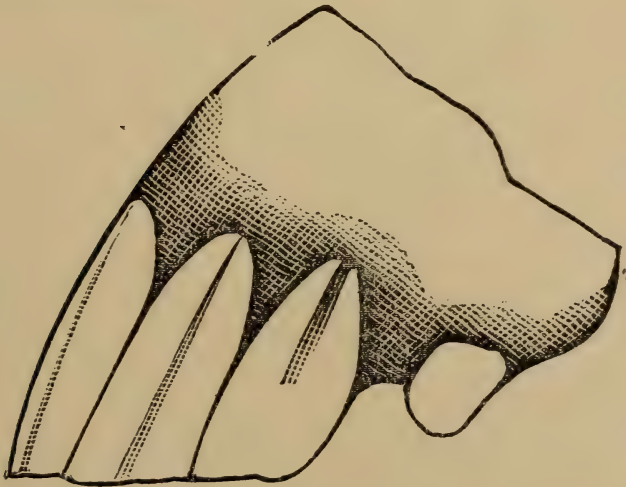
This is the general rule—but there are exceptions; at least, there are shell-teeth, or holes in the teeth, that would tend to deceive the beginner, and if we had no other marks



to go by, except the cups, we would find it a difficult task to determine the horse's age with any degree of certainty. But we understand other marks that are more reliable than the cups we have just spoken of.

Some unprincipled men might make false cups in the teeth to make the horse appear younger to those persons not fully conversant with all the marks in the mouth. It will be noticed, by examining the outside of the teeth of horses between the ages of five and ten years, that they have smooth corner teeth, as shown in cut No. 9.

At ten years of age there will appear a small groove on the upper corner tooth close to the gum, about half the size of a grain of wheat, and this groove will appear longer as the horse advances in age; and when he arrives at the age of twenty-one years, this groove will show all the way down the tooth, as it appears in the nipper and middle teeth of the following cut.



No. 15.

Side view of the horse's jaw at the age of fifteen years.

The above cut represents the side view of the upper jaw of a horse fifteen years old, with the groove half way down

the upper corner tooth; or, in other words, to make it plain, the groove shows down the tooth one-half the distance from the gum to the crown. In measuring the length of the tooth in this case, we always measure from the gum to the longest point of the tooth; but, to be better understood, we will say measure the longest side of the tooth to get the proper length. If this groove should show half way down the longest side of the tooth, as represented in cut 15, the horse will be fifteen years old without a doubt.

If it shows three-fourths of the way down the longest side, he is eighteen years; and if it shows all the way down he is twenty-one years old. According to this, it will be seen that the groove starts close to the gum at ten, and will reach down to the crown at twenty-one. It takes eleven years for the groove to reach the crown, hence, one-eleventh the length of the tooth represents one year; two-elevenths, two years, and so on, and when the groove is half way down the tooth, as represented in cut 15, the horse is then fifteen and a half years old—providing we count the fraction—from the fact that one-half of eleven is five and a half, and the groove not making its appearance on the tooth until the horse arrives at the age of ten; adding the ten to the five and a half, counting the fractions, makes him fifteen and a half years old.

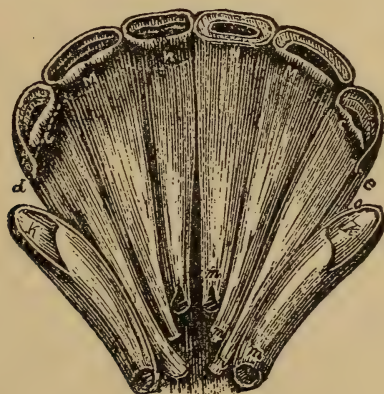
But as we are perfectly satisfied to be able to come within a year of the horse's age, we will throw this fraction out and simply say fifteen years old. We will lay down a simple rule to examine this tooth and grove by:

If the groove is just starting on the tooth, the horse is ten years old; one-eleventh down the tooth, he would be eleven years old; two-elevenths, he would be twelve years old; three-elevenths, thirteen years old; nearly half way, fourteen years old; half way, fifteen; a little below half way, sixteen years; still a little farther down, seventeen years; three-fourths of the way down, eighteen years; a little more

than three-fourths of the way, nineteen years, and almost to the crown, twenty. When the groove reaches from the gums to the crown, he is twenty-one, measuring with the eye. This being as far as we propose to teach, scientifically, the horse's age, the reader, by a 'close examination of horses' mouths that he knows the age of positively, and comparing them with the above rules, will soon be able to tell correctly the age of any horse from the time he is foaled to twenty-one years.

We have endeavored, in the above instructions, to give in plain language the simplest, yet the most scientific method of telling the horse's age known.

In order to still further explain the anatomical and physiological structure of the teeth, we will refer the reader to the following illustrations:



No. 16.

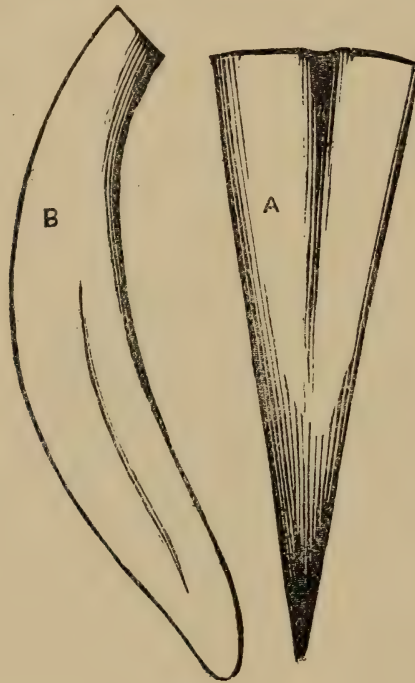
Teeth as they are located in the jaw.

Cut 16 represents the way and manner in which the teeth are located in the jaw of the horse. The roots, as they are commonly called, are narrow at the ends, while the crown of the tooth is much wider. The dotted line, from D to E, represents that portion of the tooth which extends above the gums, and the lower parts are buried beneath the gums in the jawbone. K K represent the tusks or hook teeth, commonly called bridle teeth, just about to cut through the



gums, and as there is no certain time to be relied upon for these teeth to cut through, we will say nothing more about them, as this would mislead the reader.

The six teeth are marked NN, MM and CC. The three on the left show the shape of the teeth, on the crown, as they come through the gum, while the three on the right show some little wear by coming in contact with the upper jaw.



No. 17.

Full size front and side view of nippers as they appear when pulled out of jaw.

Cut 17 is the full-size, front and side view, of the tooth called nipper. A represents the front view, and B shows the side view of the same tooth.

By noticing the front view, marked A, of the nipper tooth, in Cut No. 17, you will see that at the crown or top it is quite wide, and gradually tapers to the root, where it

is quite pointed, and the black mark, beginning at the crown and running down near the whole length of the tooth, represents the groove we dwelt upon before.

The representation in Cut 17, marked B, gives you a side view of the same tooth, and shows the top or crown to be much narrower on the side than on the front, and instead of gradually tapering down to a sharp point, it bulges out, or becomes thicker, near the middle than at either end. By this it will be seen that as the tooth wears away, by coming in contact with the upper jaw, the crown becomes narrower, as it wears down to the root, and thicker from the outside to the inside of the tooth.



No. 18.

Shows nipper as it appears at three, six, twelve, eighteen and twenty-four years.

Cut 18 shows the shape of the crown of the nipper tooth at different ages. The upper section of this tooth shows a three-year-old tooth.

The width is from figure one to figure two, while the thickness is shown from figure three to figure four. The

second section of this tooth shows a six-year-old, and the third section shows a twelve-year-old tooth. The fourth shows eighteen years old, while the fifth, and lower section, shows twenty-four years.

If the reader will carefully examine this illustration he will notice that the upper section from one to two is twice as wide as it is thick, while in the lower section, showing the same tooth at twenty-four years, will discover that it is twice as thick as it is wide.

The width is from one to two, and the thickness from three to four.

We will next call your attention to cut 19.



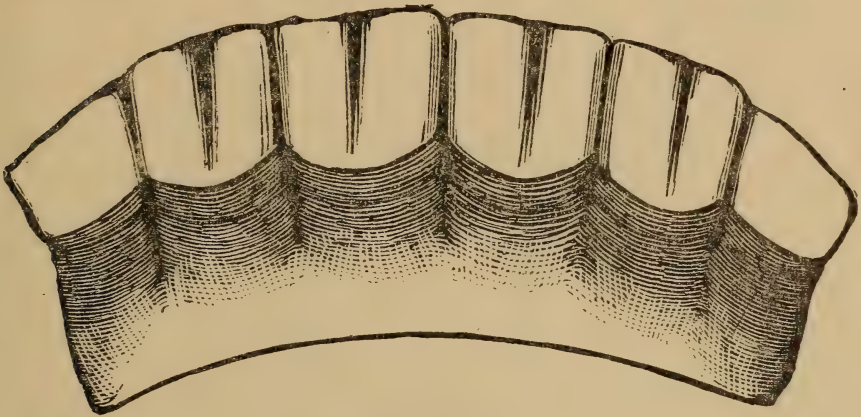
No. 19.

Life-size inside view of five-year-old.

This cut will represent a life-size, inside view, of the lower jaw of a five-year-old, showing all the cups or marks in the teeth as they would appear in the five-year-old mouth. N N the nippers, M M the middle, C C the corner teeth.



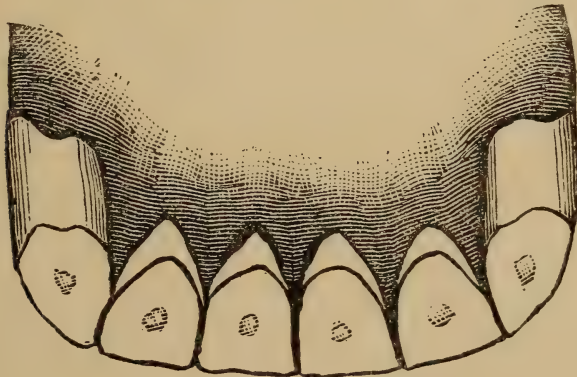
Cut No. 20 shows a life-size outside view of the lower jaw of a colt five years old.



No. 20.

Life-size outside view of a five-year-old.

Cut 21 shows a life-size inside view of the lower jaw of a horse twenty-four years old.



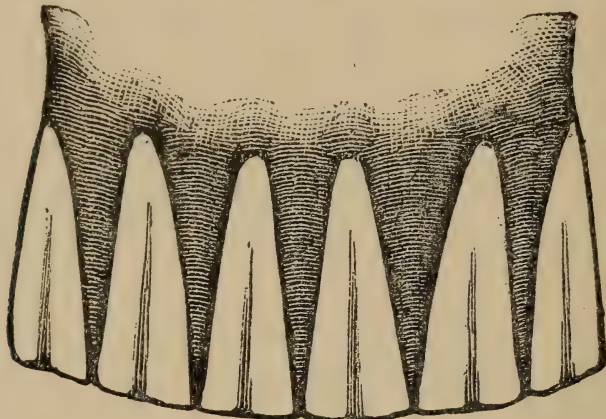
No. 21.

Life-size inside view of a twenty-four-year-old.

Cut 22 represents the outside view of the lower jaw of a horse twenty-four years old.

These last six cuts, 17, 18, 19, 20, 21 and 22, are not inserted to show any particular age, but to post the pupil

more fully in regard to the shape and form of the teeth at different ages, showing the two extremes, the very young and the very old.



No. 22.

Life-size outside view of a twenty-four-year-old.

By closely observing the cuts above mentioned, more particularly the last four, it will be seen that the five-year-old shows very wide across the crown, while the twenty-four-year-old shows very narrow across the crown, both the inside and outside views. This is caused by what is called the alveolar process.

It will be more fully understood by the pupil to say the teeth in the young horse are long, while those in the old horse are short, as shown in Cut No. 18.

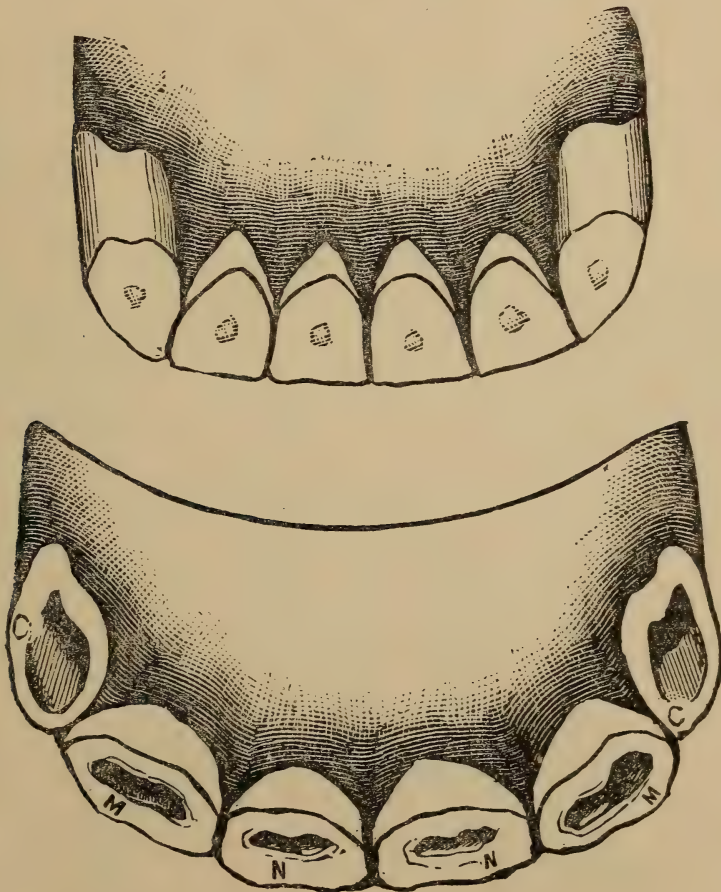
Most people are under the impression that young horses have short teeth, and that old horses have long ones. It is just the reverse. The old horses have the short teeth and the young ones the long, as will be seen in Cut No. 17. A shows the front and B the side view of a full-size tooth of a young horse, which averages in length from  $2\frac{1}{2}$  to 3 inches.

While Cut No. 18, lower section, represents the horse when he is very old—three-fourths to one inch long.

The reason people call the old horse's teeth long is because they show further out from the gums, while the young

horse's teeth are buried in the jaw-bone and covered by the gums. For this reason the young horse's teeth appear short, while the old horse's teeth look longer because they project farther out from the gums.

There are some horses that have what are called parrot-mouths, where the upper jaw teeth extend over and beyond the lower jaw teeth. Should this be the case, they will not wear off short, but the teeth of a horse eight or nine years old will show as long as a horse of twelve or fifteen will, where the teeth come together and wear off properly on the crowns.

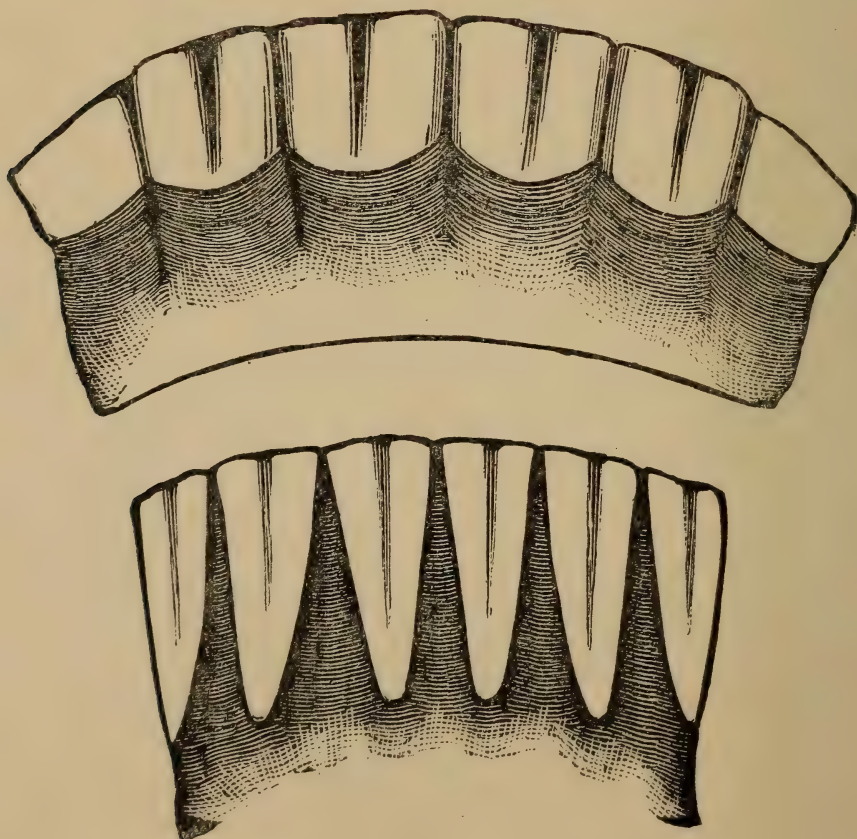




Page 53 shows the two inside views of the lower jaw together, so that the pupil can see the contrast between the old and young mouth.

We will also put the two outside views together on this page, so the pupil can see the width and shape of the teeth and gums. By noticing closely, it will be seen that the gums in the young mouth are nearly straight across, while the old mouth shows the gums extending up between the teeth.

The upper view on page 53 shows twenty-four years old; the lower view, only five. On page 54 the upper view shows five, and the lower one twenty-four years.



We will next proceed to explain as well as possible to the pupil what is meant by the alveolar process.

In the human as well as in the horse, the teeth are constantly and slowly, as nature directs, moving up out of the sockets, and as the teeth in the horse are smaller at the roots than at the crown (as shown in cut No. 17), it will be understood, as they move out of the sockets, that the further out they get the narrower the mouth will show.

The jaw-bone naturally contracts to fill up the space left by the teeth coming out of their sockets, and as this is a gradual process from the time the horse is fully developed, the older he gets the narrower the jaw will show. Hence the old horse's jaw will be much narrower than the young one, as will be readily shown by the cuts on pages 53 and 54.

Another marked difference will be perceptible in the young horse's mouth and teeth, which is that the shape of the crown of the teeth will be that of a half-circle, while in the old horse they will show almost straight across the crown, showing the shape the alveolar process leaves the old horse's mouth in.

It will also be noticed that the teeth in the young horse, marked N, M and C, nippers, middle and corner, are entirely of a different shape on the crown, while the nippers of the young horse are much wider than they are thick, the old horse's nippers shows much thicker than they are wide (see pages 53 and 54).

We next call the attention of the reader to cut No. 23, which represents the inside view of the lower jaw of an old horse, in which the teeth have been sawed off, and not naturally worn off.

Cut No. 24 represents the outside view of the same jaw illustrated in cut 23.

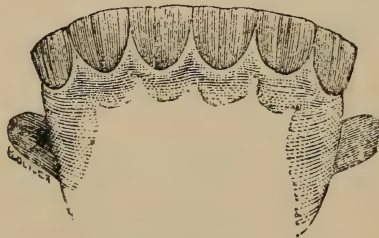
Many unprincipled men have a rascally trick of sawing off the horse's teeth and cutting holes in the crown, and then

putting a red-hot iron in the holes to make black marks or false cups.



No. 23.

This is called "Bishopping," because the man who first practiced this fraud was named Bishop. When this operation is performed on a horse that is getting along in years, it might deceive those that are not familiar with the formation and structure of the teeth; but, after a close investigation of the young and old mouth, as shown by cuts 19 and 20, it will be impossible to deceive the pupil.



No. 24.

These simple but practical rules can become understood thoroughly by examining the mouths of different-aged horses.











LIBRARY OF CONGRESS



0 002 863 191 1

